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ABSTRACT

A literature review was conducted to identify factors leading to career indecision among adolescents and college students and to examine existing programs designed to assist such students in selecting careers. According to the literature, many practitioners view career indecision as a normal task of development whereas others see indecision as related to serious psychological problems such as anxiety, self-perceptual difficulties, and externalized attributions. Several of those theories that postulate career indecision as a normal part of the development were reviewed. One of those theories, which views the decision-making process as extending over the individual's lifetime and as being composed of a period of anticipation and a period of implementation and adjustment, was used as the basis for the development of the following three goals for those individuals assisting students in the career decision-making process: (1) help students gain self-knowledge, (2) assist students in acquiring information about careers and alternatives open to them, and (3) aid students in their career preparation. Specific strategies for use in attaining these goals, as well as a list of works dealing with career indecision and career choice, are included. (MN)

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Career Indecision Among Adolescent/College Students:
A literature Review and Suggested Interventions

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Career Indecision Among Adolescent/College Students: A Literature Review and Suggested Interventions

This paper reviews the recent literature discussing factors which impact upon career decisions, the nature of the indecisive student, and programs whose goal is to assist adolescent and college students in selecting careers. Information is provided on career development theories; suggestions are made on how to help a student who is in the process of deciding upon a career. Fuqua and Hartman (1983) view career indecision as a normal task of development, yet other professionals see indecision as related to serious psychological problems such as anxiety, self-perceptual difficulties, and externalized attributions. Berzonsky (1981) agrees with the developmental perspective since he states that personality development ideally involves selecting an occupational position which is perceived as being consistent with the adolescent's abilities, skills, interests, values, and aspirations. The present author finds the developmental conception to be of value and offers this idea for your consideration. Regardless of how the educator views career indecision, personal ethics should motivate school personnel to help students with career decisions, thereby encouraging student development and preparing a student for life as an adult worker.

Needs for Assistance

Several authors advocate the delivery of career services to young people. Crites (1981) views work as central to life and as a major component of general adjustment. He values career counseling as a means for assisting the student with both career and personal development. Career counseling is one way to facilitate career development. There is evidence to suggest that students are in need of career services. For example, Gordon (1981) estimates that between 22 and 50 percent of entering college students are unable to select a major. Once in a college setting, an estimated 50 to 60 percent of the students change their majors. In a survey of college students, Haviland and Gohn (1983) found that 30.3% indicated some chance of changing their majors while 49.1% had made one or more career choice changes. Walters and Saddlemire (1979) report that an average person will change occupations three or four times during his/her life. These figures suggest that career changes are typical, but the individual undergoing such career changes may experience many problems. Bechtol (1978) interviewed a number of college students and commented on the difficulty and frustration encountered by the undecided student. It is easy to blame an indecisive student for his/her situation, however, this does not solve the problem and may create future social problems such as, a large number of untrained laborers, alienated youth, and maladjusted adults.

The Nature of the Indecisive Student

The reader may be wondering what the indecisive student is like. Ironically enough, Gordon (1981) found the indecisive student is similar to the decided student in demographic characteristics, reasons for entering college, and areas of occupational interest although the former student requests information, individual counseling, and career planning courses. Taylor (1982) noted that undecided students have an external locus of control and a fear of success. Jones and Chenery (1980) factor analyzed reasons students gave for being undecided. Three factors were isolated. If reasons clustered in Factor I, the student indicated indecisiveness was due to a lack of self-confidence or to uncertainty about his/her skills, interests, or abilities. High loading on Factor II indicated the individual has not related his/her interests and abilities to an occupational field. Factor III was associated with perceptions of indecision as originating outside of oneself, conflict with a significant other, and a lack of educational/occupational information. If the subject's reasons fell into Factors I and III, the student was anxious, lacked a clear sense of identity, and felt out of step with the world. In a similar study involving the Career Decision Scale, Rogers and Westbrook (1983) found four factors related to career indecision: (1) a perceived lack of information, (2) a search for the ideal career, (3) the experience of external limits which prohibited a choice from being implemented, and (4) difficulty in selecting from too many appealing choices.

Fuqua and Hartman (1983) differentiated three types of undecided students; types which were experiencing normal developmental tasks, those whose indecision is acute or situationally induced, and those who are chronically indecisive. The characteristics and needs of each type are different resulting in the need for different intervention approaches. Fuqua and Hartman (1983) present an interesting table comparing these different indecisive students.

Perry (cited by Gordon, 1981) has proposed a Student Development Theory which describes four stages a student passes through while attempting to decide on a career. In the first stage, called dualism, the student has very simple reasoning skills, is characterized by an external locus of control, and views the teacher or counselor as an authority who has the "right" answer. This young person will probably ask for "the test" to help him/her select the "right career". During the multiplicity stage, the student will be more responsible for his/her learning, becomes aware there are multiple good career choices, realizes the counselor does not have the answer, and that evaluating all alternatives is a part of the decision-making process. By the

relativism stage, the student is able to synthesize ideas and make decisions which are in accord with personal needs and interests. Uncertainty about choices is also accepted. In commitment, the individual views a career commitment as an on-going process requiring continuing effort. Educators may encounter students in any of these stages.

It is apparent there are many types of indecisive students. They may be different in their reasons, in developmental stage, in life experiences, or in ability to make decisions. Working with each student will require an individual assessment of the student's needs and different intervention strategies. Before describing a suggested approach, a brief review of career development theory will be presented.

Theories of Career Development

There are many theories of career development, but this discussion will highlight two developmental theories and one decision-making theory. Ginzberg, Ginsburg, Axelrod, and Herma (cited by Osipow, 1973) viewed vocational choice as being divided into three periods -- Fantasy, Tentative, and Realistic. Basically, the individual progresses from a play-orientation to a work-orientation, begins to consider reality, his/her interests, abilities, and values, takes an interest in being of service to others and evaluates his/her ability to do a certain type of work. Powell and Bloom (1962) examined occupational choices for adolescents, age 14 to 19, noting an increased interest in being of service and an emphasis on ability to do certain work, thus supporting the ideas of Ginzberg. This theory implies one considers a number of occupations, selects one, then refines the choice to become more specific and more realistic as one ages.

Super (1953) also viewed career selection as a developmental process consisting of five stages: Growth, Exploration, Establishment, Maintenance, and Decline. The typical college-age student is expected to be in the exploration stage where changes in the intended career are frequent or where career plans are not necessarily finalized. According to Osipow (1973), Super viewed occupational level attainment as being influenced by work experiences, parental socioeconomic level, mental ability, and personality characteristics. Vocational development was conceptualized as being intimately related to the person's self-concept. Literature relevant to Super's theory will be discussed later in this paper.

In 1963, Tiedeman and O'Hara formulated a decision-making theory of career choice. Although called a decision-making approach, the

theory has a developmental flavor as will be seen in the following description. According to this theory, the decision-making process extends over the individual's lifetime and is composed of two periods. The first, the Period of Anticipation, consists of the exploration, the crystallization, the choice, and the specification substages while the Period of Implementation and Adjustment consists of induction, transition, and maintenance substages (Fredrickson, 1982). The decision process is initiated when one feels unsatisfied with a present vocational situation -- regardless of one's age. The person then progresses through the substages by identifying alternatives (Exploration), exploring personal values (Crystallization), selecting a career based on values (Choice), clarifying the projection of oneself in that situation (Specification), beginning the process of career preparation (Induction), making any necessary changes in oneself (Transition), and achieving a sense of making an appropriate choice (Maintenance). Using this theory as a base, the educator can assess how far a student is in the decision process and can provide information or activities relevant to each substage. Table 1 presents samples of tasks which are suggested for each substage; teachers could adapt these tasks for use in the classroom.

Suggested Intervention

Since the nature of career indecision and career development theories have been reviewed, it is now appropriate to proceed with some suggestions for intervention. Three goals for assisting the indecisive student can be specified: (1) help the student gain self-knowledge, (2) assist the student in acquiring information about careers and alternatives open to the student, and (3) aid the student in his/her career preparation. Teachers, counselors, paraprofessionals, and career planning/placement personnel can join together as a team to facilitate career decision-making among undecided college students. This task is monumental, thus it requires the interests and efforts of many caring people to achieve the goals listed above.

Goal 1: To help the student gain self-knowledge. When a student presents himself for career services, the professional is wise to spend time interviewing the student in order to more adequately determine the student's specific needs. However, the helping process is complicated because a number of factors impact upon the career decision process; the helper may not be fully aware of these factors. O'Neil and Bush (referenced by O'Neil, Ohlde, & Barke, 1980) formulated a six factor model of career decision influences. Familial factors include parental role models and early childhood experiences. Societal factors refer to educational and peer group experiences, as well as the influence of the mass media. Situational factors are defined as chance and the

Table 1:SAMPLE TASKS FOR SUBSTAGESPERIOD OF ANTICIPATION

1. EXPLORATION

- RESEARCH LABOR TRENDS & JOB OPPORTUNITIES
- READ INFORMATION IN DOT, CAREER FILES, &
OCCUPATIONAL OUTLOOK HANDBOOK
- EXAMINE ABILITIES & INTERESTS

2. CRYSTALLIZATION

- WRITE A CAREER AUTOBIOGRAPHY
- VALUE CLARIFICATION TASKS
- RATE PRIORITIES OR DESIRED JOB REWARDS

3. CHOICE

- VOCATIONAL INTEREST TESTS
- SELF-DIRECTED SEARCH
- OTHER SOURCES OF CAREER INFORMATION

4. SPECIFICATION

- VOLUNTEER/PART- TIME WORK
- CAREER KITS & JOB SAMPLES
- INTERVIEW PEOPLE IN CAREER OF INTEREST
- WRITE TO ALUMNI EMPLOYED IN THE CAREER

PERIOD OF IMPLEMENTATION AND ADJUSTMENT

1. INDUCTION

- SECURE INFORMATION ON HOW TO ENTER CAREER
- GAIN APPROPRIATE EDUCATION AND TRAINING
- DO INTERNSHIP EXPERIENCES

2. TRANSITION

- SET MORE SPECIFIC GOALS
- ALTER SELF PERCEPTIONS AND HABITS
- CORRECT DEFICIENCIES IN TRAINING
- WRITE RESUME
- INTERVIEW FOR POSITIONS

3. MAINTENANCE

- SECURE EMPLOYMENT IN CAREER
- CONTINUE EDUCATION OR UPDATE TRAINING
- JOIN ASSOCIATIONS & SPECIAL INTEREST GROUPS
- MAKE CONTRIBUTIONS TO THE FIELD
- TAKE ADVANTAGE OF ADVANCEMENT OPPORTUNITIES

course of least resistance while socioeconomic factors consist of social class, race, sex-discrimination, and the supply and demand of jobs. Individual factors refer to self-expectations, abilities, interests, attitudes, and achievement needs. The psychosocial-emotional factors include variables such as fears of failure or of success, lack of confidence, lack of assertiveness, and role-conflict. A helper could discuss these factors during the interview, thus using the O'Neil model as a guide for learning about the student's background. Posing questions about abilities, interests, attitudes, parents, early and educational experiences may stimulate the student to begin a self-exploration process. Through the use of aptitude and vocational interest tests (e.g., the Strong-Campbell), objective data can be obtained to assist the student in selecting alternative careers for further exploration.

Sex-role attitudes and sex-stereotyping of occupations have a huge impact upon career selection. According to the findings of Peterson, Rollins, Thomas, and Heaps (1982) children receive differential treatment in the home based upon the gender of the child. Further, 71% of the fathers and 61% of the mothers participating in this study indicated homemaking should be the daughter's primary career, which incriminates families as having traditional sex-role attitudes. Woodcock and Herman (1978) found that adolescent girls typically plan for a temporary job requiring little training and they view post-high school employment as activities to fill their time prior to marriage. In a study of vocational preferences among 6th, 7th, 11th, and 12th grade girls, Rakowski and Farrow (1979) noted 62.6% chose traditional sex-typed occupations and many planned for marriage and children. Gottfredson (1981) proposed that developing individuals choose to eliminate careers which are inconsistent with one's sex type at an early age. Scheresky (1976) observed that six year olds stereotype occupations as being appropriate for males or females. Harren, Kass, Tinsley, and Moreland (1979) found that female undergraduates tend to choose female-dominant majors while males choose male-dominant majors, thus supporting the idea that the student's biological sex and sex-role may indeed result in the elimination of viable alternatives on the basis of gender. However, George and Schaer (1983) studied occupational choices of second and fifth graders. Males were found to select male occupations 100% of the time while females selected female occupations only 43% of the time.

As adults, some women do in fact select nontraditional careers. The vast amount of literature addressing characteristics of such females (e.g., Farmer, 1980; Fretz & Leong, 1982; Greenfield, Greiner, & Wood, 1980; Haber, 1980; Handley & Walker, 1981; Houser & Garvey, 1983;

Parsons, Frieze, & Ruble, 1978; Trigg & Perlman, 1976; and Ware, 1980) have focused on variables such as achievement role models, peer or family support of the career choice, low affiliative needs, parental education, identification, and/or job satisfaction as being associated with nontraditional career choices of females. A female whose home life is not typified by these traits may find she has extreme difficulty with a nontraditional choice. She may decide to change her intended career to make it more consistent with a traditional female role.

Social class is another important variable to examine while working with an indecisive student. Caplow (cited by Sewell & Martin, 1976) has noted a tendency for children to inherit their parents' occupational level. Social class may provide the child with an acceptable range of occupations from which the child is expected to select a career. Werts (1968) observed that three types of occupations seem to be passed from fathers to sons -- careers in the physical sciences, in the social sciences, and in the medical occupations. Tennyson, Hansen, Klaurens, and Antholz (1980) reported that children of skilled workers tend to enter skilled occupations and children of business or professional persons tend to enter business or professional careers. Nelms, Pentecoste, and Lowe (1982) found that high school students in a disadvantaged social class frequently chose clerical jobs.

Parental occupations appear to influence career selection in other ways. Tseng (1972) investigated the backgrounds of boys who dropped out of high school. If the father had a nonprestigious occupation and limited educational training, the son was likely to have lower educational aspirations. Such aspirations could mean the son will have less opportunity for higher level careers. Poole (1983) found that differences in social class affect motivation, expectancies, and information-seeking behavior of students. DeFleur and Menke (1975) observed that youths classified at a working class level knew more about lower level occupations (e.g., truck driver or sawmill worker) than they did about engineers and accountants. The Pennsylvania Association of Colleges and Universities (1984) found that high school students of high socioeconomic status are more likely to enroll in a college prep curriculum than are students of lower socioeconomic levels. Social class differences are related to differences in educational background which can result in differential preparation for future careers.

Familial variables in combination with sex-role orientation and social class are influential in shaping a student's interests (Crites, 1962) and personality patterns (Grandy & Stahmann, 1974a & b). Also, Walsh reported that sixth graders' work values were most similar to

those of their like-sexed parent. Self-exploration may help a student understand his/her value system and help to identify what rewards are desired from the future career. Gade and Peterson (1977) examined preferences for career rewards. Extrinsically motivated subjects desired economic returns, independence, prestige, security, supervisory relations, and job variety as important sources of satisfaction. In contrast, intrinsically motivated subjects preferred achievement, creativity, altruism, esthetics, intellectual stimulation and management as rewards. Research has generally shown that females anticipate and prefer intrinsic rewards more than males (Stake, 1978, cited by Walsh, 1979; Taylor & Thompson, 1976, cited by Wheeler, 1981). Hazer, Tzeng, Reissman, and Landis (1981) found that high school blacks were more likely to rate extrinsic factors as important in their career decisions. Yet, Gottfredson (1978) noted that highly educated black males tend to enter social occupations. Greenfeld, et al. (1980) compared women in male and female dominated fields. Females in the male fields were more success-oriented and valued recognition, high salary, authority, and responsibility. Women who select careers of a nontraditional nature may have different motivators than both males and females in traditional careers. Both racial and sex differences exist in preferred careers and in occupational rewards, but the reasons for such differences remain unclear.

Religious background may also affect values and satisfactions with the career. Mirels and Garrett (1971) investigated the Protestant Work Ethic in relation to occupations. Endorsement of the Work Ethic was associated with occupations demanding a concrete, pragmatic approach to work. Occupations which are positively related to belief in the Work Ethic place a premium on conventional adherence to prescribed role-appropriate behaviors and devalue innovation or creativity in work. Belief in the ethic was negatively related to occupations that require emotional sensitivity, theoretical interests, and humanistic values. Vecchio (1980) found that religious affiliation accounted for a significant portion of variance in job satisfaction. Job satisfaction and occupational prestige were highly correlated for Jewish adults, but the correlation was not as strong among Catholics. Catholics expressed greater satisfaction with jobs of lower prestige than other religious groups. Nevertheless, Zuckerman (1980) found that college women who had higher educational goals tend to have either a Jewish or Catholic upbringing and to select less traditional majors.

An understanding of the student's background will facilitate efforts to help the student select a satisfying career. Sie, Markman, and Hillman (1978) noted that college juniors and seniors felt occupations should be (1) satisfying to the self, (2) satisfying

to the spouse, and (3) satisfying to parents. One cannot determine what will satisfy the self, the spouse, or the parents without an investigation of the student's attitudes, values, and preferences. While the interview and further counseling or advising sessions are time-consuming, these help the student to explore which is one of the first steps in decision-making. Teachers in all educational settings may encourage self-exploration by using assignments and group discussions to focus the student's attention on who he is, how he became what he is, and what are the student's goals in life. An attitude that self-exploration is important is a manifestation of humanism and displays the educator's concern for students.

Goal 2: To assist the student in acquiring career information and information about available opportunities. DeFleur and Menke (1975) accuse the educational system of failure to prepare potential workers for the future. Tennyson, et al. (1980) state "Education has fallen short in helping the student see how skills and concepts being taught relate to the larger context of human behavior and social aspirations in the work and leisure worlds." Grotevant and Durrett (1980) found high school seniors lacked information on the educational requirements of desired careers and knowledge of vocational interests associated with each career. Nuckols and Banducci (1974) found that high school seniors had greater knowledge of low level occupations than of high level occupations. The personal experiences of students (such as early work, family occupations) were associated with knowledge of particular occupations. Providing students with occupational information was found to increase the number of careers considered by seventh graders (Harris & Wallin, 1978) which indicates exposure to career information can encourage career exploration.

Poole (1983) examined various sources where young people may turn for occupational information. She presented evidence to indicate that few students use career resource personnel such as guidance counselors in the school. Students tend to discuss occupations with parents and teachers who may not be trained to give career information. Greenhaus, Hawkins, and Brenner (1983) also noted talking to family and friends is a popular form of career exploration, however, it is unrelated to making career decisions or to career knowledge. Thus, it is important to make career information available to students to help them with career decisions.

Some readily available sources of career information include materials such as films, professional journals, pamphlets, apprenticeship programs, and the Dictionary of Occupational Titles or the Occupational Outlook Handbook, published by the U.S. government. Some states offer a state-wide computer information

system which provides a wealth of occupational information. School counselors and placement personnel should also establish personal contact with agencies in the community which can be used as referral sources. Examples would include vocational rehabilitation services, technical colleges, specialized training schools, military recruiters, music, art, or dance instructors, and places where students can learn computer skills. Teachers may also use their professional contacts to contribute to the student's career advancement or as a source of information for units of career instruction. In elementary schools, the parents may be invited to speak to students on career days, thus helping with career education and actively involving parents in the educational process. Unfortunately, career information is not a cure for indecisiveness, but it is essential for one to have occupational information before one can make an informed career decision. However, Bodden and James (1976) suggest that students may distort incoming information to make it fit with preconceived ideas about work. This cannot always be prevented since the process is related to the student's perceptual system.

Perceptions of opportunities may prevent the student from selecting a career since he/she may feel there are rigid barriers to particular careers which he/she is unable to cross. Garrett, Elin, and Tremaine (1977) noted their subjects viewed more jobs as being open to men than to women. McLure and Piel (1978, cited by Walsh, 1979) reported that few women choose careers in science or technology because they have doubts about combining family life and a career, they lack relevant information, they believed influential adults, and saw few examples of how women can play an important role in science. Sewell and Martin (1976) found that black high school students were more interested in artistic, health and welfare, or business-clerical occupations while not being as interested in science-technology, mechanical, or outdoor activities. It appeared these students were reluctant to choose a field in which blacks are not clearly visible.

The fear of success literature leads to the conclusion that individuals who are successful in nontraditional sex-roles are devalued (Illfelder, 1980; Janda, O'Grady, & Capps, 1978) and that female success is often attributed to luck (Heilman & Guzzo, 1978, cited by Walsh, 1979). Cherry and Deaux (1978) found subjects anticipated negative consequences for characters who succeed in nontraditional fields and violate sex-role norms. The same process may be operating among minority group members, thus blacks may tend to choose careers in which other blacks are successful and highly visible. Perhaps fear of success and the inability to tolerate negative evaluations from others serves as an invisible barrier to

entry into a desired occupation for women, blacks, and other minority group members.

Sie, et al. (1978) found black female science majors felt discrimination from teachers and administrators. Slaney (1980) noted racial differences in perceived barriers among women. White females listed more factors which could impede career goals while black women frequently listed financial difficulties. In higher education, the admissions office could help eliminate some of these barriers by providing students with complete details on financial aid programs. The high school guidance counselor may play a critical role in this area by conducting workshops on financial aid and by exposing students to appropriate sex or racial role models who have been successful in nontraditional careers. Placement centers may opt to collect data on which employers hire women and minority group members in nontraditional roles and on the typical characteristics of students who are hired by major companies. These data may help students evaluate their opportunities in a more realistic way.

Goal 3: To aid the student in career preparation. One way to assist the student with career preparation is to infuse career education into the present educational system. Stevenson (1975) presents a strong argument for this tactic by stating, "The ultimate task and goal of the school is to receive each child as a unique person with varying capabilities and within the span of 12 years, to nurture these capabilities into a comparatively mature individual equipped with entry level skills for the occupational world." If educators continue to fail in this task, then we are cheating our students and the educational system is guilty of neglect. This author hopes we will all take steps to improve the current situation. Let us look more closely at the philosophy of career education as a method.

Hoyt (1977b) states the career education movement emphasizes education as preparation for work. Further, career education needs the collaborative support of the entire formal educational system, the community, and the home/family structure. The aim of career education is to increase student understanding of the self and of educational/occupational alternatives (Hoyt, 1976). Career education should equip students with basic academic skills, good work habits, a personally meaningful set of values, career decision-making skills, and skills in job-seeking, job-getting, and job-holding (Hoyt, 1976). The career education philosophy does not seek to replace traditional education nor is it an add-on program or another name for vocational education (Hoyt, 1977a); it is a conceptual framework which teachers are asked to implement into the current teaching-

learning process in an effort to make skills which are taught more relevant to the student. Although some educators resist the challenge of career education, Tennyson, et al. (1980) remark, "Many teachers some discover that world of work activities enliven student interest and motivate a desire for learning." If this is the case, then students should reap more benefits from formal education and become more productive members of society when they are exposed to career education programs. Hoyt (1976) states that career education efforts are generally evaluated positively and experience a pattern of growth in settings where they have been implemented.

In elementary and secondary schools, teachers may increase career awareness by taking students on field trips to occupational settings and asking students to do follow-up assignments focusing on the workers, what the workers did, and how the workers feel about what they are doing. Students may also interview their parents or neighbors to learn more about careers and share this information with their classmates during career fairs. In the classroom a teacher may discuss the type of job specific training will lead to, the time and amount of education required to gain skills or knowledge, and the problems of workers. Cross-age tutoring where senior citizens teach skills to young people or where adolescents tutor elementary students is an effective strategy of passing skills on from one age group to another and may help students explore teaching as a possible career (Tennyson, et al., 1980).

The Pennsylvania Association of Colleges and Universities (1984) also recommends utilization of computer guidance systems, the use of video-taped materials, career or educational fairs, and the "Adopt a School" plan where industry is encouraged to support one school with financial contributions, donations of time or career materials, and sponsoring internship experiences. The counselor within a school setting could provide career information, arrange direct work experiences, counsel students on career decisions, and conduct a variety of workshops including writing resumes, interviewing skills, and locating job vacancies as possible topics. In order to familiarize students with the process of applying for a job, sample applications can be kept in the office for the student to practice.

At the college level, there has been increased attention devoted to career education (Walters & Saddlemire, 1979). The recent literature was surveyed to examine career education programs. Eight programs were selected via this survey; all are conducted by colleges or universities located in the United States (e.g., Alabama, Arizona, California, Kentucky, Louisiana, Minnesota, Pennsylvania, and Utah). Three of the eight were workshops, two were career exploration courses, and the

remainder involved other types of student groups. Access to sources of occupational information was a technique used in three programs while three others utilized resource personnel such as faculty members or successful professional women. Self-exploration exercises and/or vocational tests were a part of five of these programs. Four programs also employed values clarification exercises. Emphasis was placed on goal setting or on decision-making in five of the eight programs. Table 2 presents a summary of these findings.

Conclusions

Young people apparently have difficulty selecting their careers as evidenced by the high rates of students entering college as undecided majors and by the number who change majors. This suggests that career indecision is a significant developmental problem for youth which requires attention from educational personnel. This paper has advocated a view of career indecision as a part of normal development rather than as an indication of serious psychological pathology. Two theories of career development and a theory of career decision-making were discussed. Suggestions of intervention strategies were offered to facilitate career decisions among students in various substages of the decision-making process. Three goals for assisting the career indecisive student were proposed with a review of relevant research or suggestions to educational personnel.

It is recommended that research efforts continue to focus upon the process of career decision-making and on career development in order to increase the understanding of this complex aspect of human growth. Since work is such a central part of adult life, attention must be devoted to developmental problems and to the transition between school and the career if researchers are to address the problems of career indecision. All educational personnel are urged to help adolescents learn about careers in an effort to facilitate career decisions.

Table 2:

Summary Findings on
Career Education Programs

<u>Characteristics</u>	<u>Number</u>	<u>Percentage</u>
workshops	3	37.5
career exploration courses	2	25.0
other student groups	3	37.5
occupational information	3	37.5
resource personnel	3	37.5
self-exploration/ tests	5	62.5
values clarification	4	50.0
goals/career decisions	5	62.5

Note: These career education programs were presented by Bechtol (1978), Comas and Day (1976), Harman and Dutt (1974), Johnson (1977), Kuehn (1974), McConnell (1983), Obleton (1984), and Stimac (1977). For more information, the reader may consult these references.

References

- Bechtol, W. M. (1978). Helping undecided students select a major or career. Journal of College Student Personnel, 19, 570-571.
- Berzonsky, M. D. (1981). Adolescent Psychology. New York: Macmillan Publishing Co., Inc.
- Bodden, J. L., & James, L. E. (1976). Influence of occupational information giving on cognitive complexity. Journal of Counseling Psychology, 23(3), 280-282.
- Cherry, F., & Deaux, K. (1978). Fear of success versus fear of gender-inappropriate behavior. Sex Roles, 4(1), 97-101.
- Comas, R. E., & Day, R. W. (1976). College students explore careers. Vocational Guidance Quarterly, 25, 76-79.
- Crites, J. O. (1962). Parental identification in relation to vocational interest development. Journal of Educational Psychology, 53(6), 262-270.
- Crites, J. O. (1981). Career counseling: Models, methods, and materials. New York: McGraw-Hill.
- DeFleur, L. B., & Menke, B. A. (1975). Learning about the labor force: Occupational knowledge among high school males. Sociology of Education, 48, 324-345.
- Farmer, H.S. (1980). Environmental background and psychological variables related to optimizing achievement and career motivation for high school girls. Journal of Vocational Behavior, 17, 58-70.
- Fredrickson, R. H. (1982). Career information. New Jersey: Prentice-Hall, Inc.
- Fretz, B. R., & Leong, F. T. L. (1982). Vocational behavior and career development, 1981: A review. Journal of Vocational Behavior, 21(2), 123-163.
- Fuqua, D. R., & Hartman, B. W. (1983). Differential diagnosis and treatment of career indecision. Personnel and Guidance Journal, 62(1), 27-29.
- Gade, E. M., & Peterson, G. (1977). Intrinsic and extrinsic work values and the vocational maturity of vocational-technical students. Vocational Guidance Quarterly, 26, 125-130.

- Garrett, C. S., Ein, P.L., & Tremaine, L. (1977). The development of gender stereotyping of adult occupations in elementary school children. Child Development, 48, 507-512.
- George, Y., & Schaer, B. (1983). Androgyny: As reflected by elementary students' career choices. Paper presented at the Annual Meeting of the Mid-South Educational Research Association, Nashville, Tennessee.
- Gordon, V. N. (1981). The undecided student: A developmental perspective. Personnel and Guidance Journal, 59, 433-439.
- Gottfredson, L. S. (1978). Providing black youth more access to enterprising work. Vocational Guidance Quarterly, 27, 114-123.
- Gottfredson, L. S. (1981). Circumscription and compromise: A developmental theory of occupational aspirations. Journal of Counseling Psychology Monograph, 28(6), 545-579.
- Grandy, T. G., & Stahmann, R. F. (1974a). Family influence on college students vocational choice: Predicting Holland's personality types. Journal of College Student Personnel, 15, 404-409.
- Grandy, T. G., & Stahmann, R.F. (1974b). Types produce types: An examination of personality development using Holland's Theory. Journal of Vocational Behavior, 5, 231-239.
- Greenfeld, S., Greiner, L., & Wood, M. (1980). The "feminine mystique" in male-dominated jobs: A comparison of attitudes and background factors of women in male-dominated versus female-dominated jobs. Journal of Vocational Behavior, 17, 291-309.
- Greenhaus, J. H., Hawkins, B. L., & Brenner, O. C. (1983). The impact of career exploration on the career decision-making process. Journal of College Student Personnel, 24(6), 495-502.
- Grotevant, H. D., & Durrett, M. E. (1980). Occupational knowledge and career development in adolescence. Journal of Vocational Behavior, 17, 171-182.
- Haber, S. (1980). Cognitive support for the career choices of college women. Sex Roles, 6(1), 129-138.
- Handley, H. M., & Walker, R. D. (1981). Factors discriminating between females electing traditional and nontraditional programs

of vocation study in high school. Paper presented at the Annual Meeting of the Educational Research Association, Los Angeles, California, April, 1981. (ERIC Document Reproduction Service No. ED 200 756).

- Harman, R. L., & Dutt, L. G. (1977). Career counseling workshop: A new approach for undecided students. Vocational Guidance Quarterly, 23, 68-70.
- Harren, V. A., Kass, R. A., Tinsley, H. E. A., & Moreland, J. B. (1979). Influences on gender, sex-role attitudes, and cognitive complexity on gender-dominant career choices. Journal of Counseling Psychology, 26(3), 227-234.
- Harris, T. L., & Wallin, J. S. (1978). Influencing career choices of seventh-grade students. Vocational Guidance Quarterly, 27, 50-53.
- Haviland, M. G., & Cohn, I. A. (1983). Career planning needs of college students. NASPA Journal, 20(4), 28-33.
- Houser, B. B., & Garvey, C. (1983). The impact of family, peers, and educational personnel upon career decision making. Journal of Vocational Behavior, 16, 7-17.
- Hoyt, K. (1976). Refining the career education concept. (Monographs on Career Education No. 017-080-01610-9). Washington, D. C.: U.S. Government Printing Office.
- Hoyt, K. B. (1977a). Career education implications for counselors. (Monographs on Career Education No. 017-080-01619-2). Washington, D. C.: U.S. Government Printing Office.
- Hoyt, K. B. (1977b). Refining the career education concept Part II. (Monographs on Career Education No. 017-080-01739-3). Washington, D. C.: U.S. Government Printing Office.
- Illfelder, J. K. (1980). Fear of success, sex role attitudes, and career salience and anxiety levels of college women. Journal of Vocational Behavior, 16, 7-17.
- Janda, L. H., O'Grady, K. E., & Capps, C. F. (1978). Fear of success in males and females in sex-linked occupations. Sex Roles, 4(1), 43-50.
- Johnson, R. B. (1977). Life planning and life planning workshops. Personnel and Guidance Journal, 55, 546-549.

- Jones, L. K., & Chenery, M. F. (1980). Multiple subtypes among vocationally undecided college students: A model and assessment instrument. Journal of Counseling Psychology, 27(5), 469-477.
- Kuehn, J. (1974). Group counseling with undecided students. Vocational Guidance Quarterly, 22, 232-234.
- McConnell, M. E. (1983). Identifying life skills in the classroom. Journal of College Placement, 43(4), 43-44, 46-47.
- Mirels, H. L., & Garrett, J. B. (1971). The Protestant Ethic as a personality variable. Journal of Consulting and Clinical Psychology, 36(1), 40-44.
- Nelms, C., Pentecoste, J., & Lowe, W.F. (1982). Job choice as a function of sex and achievement scores for high school students. Education, 103(1), 64-67.
- Nuckols, T. E., & Banducci, R. (1974). Knowledge of occupations -- is it important in occupational choice? Journal of Counseling Psychology, 21(3), 191-195.
- Obelton, N. B. (1984). Career counseling black women in a predominantly white coeducational university. Personnel and Guidance Journal, 62(6), 365-368.
- O'Neill, J. M., Ohlde, C., & Barke, C. (1980). Research on a workshop to reduce the effects of sexism and sex role socialization on women's career planning. Journal of Counseling Psychology, 27(4), 355-363.
- Osipow, S. H. (1973). Theories of career development (2nd Ed.). New York: Appleton-Century-Crofts.
- Parsons, N. J., Frieze, I. H., & Ruble, D. N. (1978). Intrapsychic factors influencing career aspirations in college women. Sex Roles, 4(3), 337-347.
- Pennsylvania Association of Colleges and Universities. (1984). Parents, programs, and Pennsylvania students' plans for post secondary education. Harrisburg, Pa.: Author.
- Peterson, G. W., Rollins, B. C., Thomas, D. L., & Heaps, L. K. (1982). Social placement of adolescents: Sex role influences on family decisions regarding the careers of youth. Journal of Marriage and the Family, 44(3), 647-658.

- Poole, M. (1983). Job choice and advice. The Vocational Aspect of Education, 35(90), 23-29.
- Powell, M., & Bloom, V. (1962). Development of and reasons for vocational choices of adolescents through the high school years. The Journal of Educational Research, 56(3), 126-133.
- Rakowski, S. L., & Farrow, J. M. (1979). Sex-role identification and goal orientation in teenage females. Psychological Reports, 44(2), 363-366.
- Rogers, W. B., & Westbrook, B. W. (1983). Measuring career indecision among college students: Towards a valid approach for counseling practitioners and researchers. Measurement and Evaluation in Guidance, 16(2), 78-85.
- Scheresky, R. (1976). The gender factor in six-to-ten-year old children's views of occupational roles. Psychological Reports, 38, 1207-1210.
- Sewell, T. E., & Martin, R. P. (1976). Racial differences in patterns of occupational choice in adolescents. Psychology in the Schools, 13(3), 326-333.
- Sie, M. A., Markman, B. S., & Hillman, S. B. (1978). Minority groups and science careers. Integrated Education, 16(3), 43-46.
- Stevenson, B. J. (1975). Developing and achieving instructional goals in career education. Journal of Career Education, 1, 40-52.
- Stimac, M. (1977). A model for evaluation of decision passages: A facet of self-assessment. Personnel and Guidance Journal, 56, 158-163.
- Super, D. (1953). A theory of vocational development. American Psychologist, 8, 185-190.
- Taylor, K. M. (1982). An investigation of vocational indecision in college students correlates and moderators. Journal of Vocational Behavior, 21, 318-329.
- Tennyson, W. W., Hansen, L. S., Klaurens, M. K., & Antholz, M. B. (1980). Career development education: A program approach for teachers and counselors. Minnesota: National Vocational Guidance Association.

- Trigg, L. J., & Perlman, D. (1976). Social influences on women's pursuit of a nontraditional career. Psychology of Women Quarterly, 1(2), 138-150.
- Tseng, M. S. (1972). Comparisons of selected familial, personality, and vocational variables of high school students and dropouts. The Journal of Educational Research, 65(10), 462-466.
- Vecchio, R. P. (1980). A test of a moderator of the job satisfaction-job quality relationship: The case of religious affiliation. Journal of Applied Psychology, 65(2), 195-201.
- Walsh, W. B. (1979). Vocational behavior and career development, 1978: A review. Journal of Vocational Behavior, 15, 119-154.
- Walters, L., & Saddlemire, G. (1979). Career planning of college freshmen and their perceptions of career planning. Journal of College Student Personnel, 20, 224-230.
- Ware, M. E. (1980). Antecedents of educational/career preferences and choices. Journal of Vocational Behavior, 16, 312-319.
- Werts, C. E. (1968). Parental influences on career choice. Journal of Counseling Psychology, 15(1), 48-52.
- Wheeler, K. G. (1981). Sex differences in perceptions of desired rewards, availability of rewards, and abilities in relation to occupational selection. Journal of Occupational Psychology, 54, 141-148.
- Woodcock, P. R., & Herman, A. (1978). Fostering career awareness in tenth grade girls. The School Counselor, 25, 256-264.
- Zuckerman, D. M. (1980). Self-esteem, personal traits, and college women's life goals. Journal of Vocational Behavior, 17, 310-319.